



06-10-02  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: van Rooijen *et al.*

Serial No.: 10/032,201

Filed: December 19, 2001

For: METHODS FOR THE PRODUCTION OF  
MULTIMERIC PROTEINS, AND  
RELATED COMPOSITIONS

CONFIRMATION NO: 4943

Art Unit: Unassigned

Examiner: Unassigned

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Date

Kelly Fischer  
Kelly Fischer

**TRANSMITTAL LETTER**

Commissioner for Patents  
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Dear Sir:

Responsive to the Notice to Comply With Requirements For Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures, mailed May 8, 2002, the following documents are transmitted herewith: a copy of the Notice to Comply and Sequence Listing Error Report, a Response to the Notice to Comply, paper and disk copies of the Substitute Sequence Listing, and a Verified Statement that the paper and computer readable copies of the Substitute Sequence Listing are the same.

The Commissioner is hereby authorized to charge any fee, including any submitted herewith if an attached check(s) is in the wrong amount or otherwise improper or missing, that may be due in connection with this and the attached papers, or with this application during its entire pendency to or to credit any overpayment to Deposit Account No. 50-1213. A duplicate of this sheet is enclosed.

Respectfully submitted,  
HELLER, EHRMAN, WHITE & McAULIFFE LLP

By:

Stephanie L. Seidman  
Registration No. 33,779

Attorney Docket No. 38814-351B

Address all correspondence to:

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UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/032,201	12/19/2001	Gijs Van Rooijen	38814-351B

Stephanie Seidman  
HELLER EHRMAN WHITE & McAULIFFE LLP  
Suite 700  
4350 La Jolla Village Drive  
San Diego, CA 92122-1246



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MAY 14 2002

Heller Ehrman

CONFIRMATION NO. 4943

FORMALITIES LETTER



\*OC00000008060526\*

Date Mailed: 05/08/2002

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS  
CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE  
DISCLOSURES**

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

**For questions regarding compliance to these requirements, please contact:**

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

**ATTACHMENT TO "NOTICE TO COMPLY WITH  
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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be submitted using one of the following methods:

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(<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual - ePAVE)
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Box Sequence, P.O. Box 2327  
Arlington, VA 22202
3. Mailed by Federal Express, United Parcel Service or other delivery service to:  
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2011 South Clark Place  
Customer Window, Box Sequence  
Crystal Plaza Two, Lobby, Room 1B03  
Arlington, Virginia 22202
4. Hand Carried directly to the Customer Window at:  
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Crystal Plaza Two, Lobby, Room 1B03, Box Sequence,  
Arlington, Virginia 22202



0425  
BIOTECHNOLOGY  
SYSTEMS  
BRANCH

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/032,201A  
Source: O1PE  
Date Processed by STIC: 4/24/02

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**  
**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**  
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**  
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**  
**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**  
**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**  
**PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)**

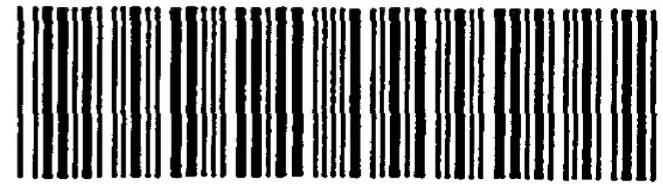
**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. **EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)**
2. **U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202**
3. **Hand Carry directly to:**  
**U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202**  
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100

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Corrected Diskette Needed  
See P. 6

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002  
TIME: 10:57:50

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Output Set: N:\CRF3\04242002\J032201A.raw

3 <110> APPLICANT: Van Rooijen, Gijs  
4 Deckers, Harm  
5 Heifetz, Peter Bernard  
6 Briggs, Steven  
7 Dalmia, Bipin Kumar  
8 Del Val, Greg  
9 Zaplachinski, Steve  
10 Moloney, Maurice  
12 <120> TITLE OF INVENTION: METHODS FOR THE PRODUCTION OF MULTIMERIC PROTEINS, AND  
RELATED  
13 COMPOSITIONS  
15 <130> FILE REFERENCE: 38814-351B  
17 <140> CURRENT APPLICATION NUMBER: 10/032,201A  
--> 18 <141> CURRENT FILING DATE: 2002-04-09  
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PATENT APPLICATION: US/10/032,201A

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TIME: 10:57:50

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139 ggatttccag aaggatttctt cggagtagag ctcaactgaca aattccgtaa acaatcgag 240  
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171 ggc cca gca cac acg gcg gcg att tac gca gct agg gct gaa ctt 96  
172 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu  
173 20 25 30  
175 aaa cct ctt ctc ttc gaa gga tgg atg gct aac gac atc gct ccc ggt 144  
176 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly  
177 35 40 45  
179 ggt caa cta aca acc acc acc gac gtc gag aat ttc ccc gga ttt cca 192  
180 Gly Gln Leu Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro  
181 50 55 60

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002

TIME: 10:57:50

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188	Glu	Arg	Phe	Gly	Thr	Thr	Ile	Phe	Thr	Glu	Thr	Val	Thr	Lys	Val	Asp	
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191	ttc	tct	tcg	aaa	ccg	ttt	aag	cta	ttc	aca	gat	tca	aaa	gcc	att	ctc	336
192	Phe	Ser	Ser	Lys	Pro	Phe	Lys	Leu	Phe	Thr	Asp	Ser	Lys	Ala	Ile	Leu	
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196	Ala	Asp	Ala	Val	Ile	Leu	Ala	Thr	Gly	Ala	Val	Ala	Lys	Arg	Leu	Ser	
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203	tcc	gct	tgt	gct	gtt	tgc	gac	gga	gct	gct	ccg	ata	ttc	cgt	aac	aaa	480
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215	gct	ttt	aga	gcg	tct	aag	att	atg	cag	cag	cga	gct	ttg	tct	aat	cct	624
216	Ala	Phe	Arg	Ala	Ser	Lys	Ile	Met	Gln	Gln	Arg	Ala	Leu	Ser	Asn	Pro	
217					195			200			205						
219	aag	att	gat	gtg	att	tgg	aac	tcg	tct	gtt	gtg	gaa	gct	tat	gga	gat	672
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221					210			215			220						
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224	Gly	Glu	Arg	Asp	Val	Leu	Gly	Gly	Leu	Lys	Val	Lys	Asn	Val	Val	Thr	
225					225			230			235				240		
227	gga	gat	gtt	tct	gat	tta	aaa	gtt	tct	gga	ttg	ttc	ttt	gct	att	ggt	768
228	Gly	Asp	Val	Ser	Asp	Leu	Lys	Val	Ser	Gly	Leu	Phe	Phe	Ala	Ile	Gly	
229					245			250			255						
231	cat	gag	cca	gct	acc	aag	ttt	ttg	gat	ggt	ggt	gtt	gag	tta	gat	tcg	816
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233					260			265			270						
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236	Asp	Gly	Tyr	Val	Val	Thr	Lys	Pro	Gly	Thr	Thr	Gln	Thr	Ser	Val	Pro	
237					275			280			285						
239	gga	gtt	ttc	gct	gcg	ggt	gat	gtt	cag	gat	aag	aag	tat	agg	caa	gcc	912
240	Gly	Val	Phe	Ala	Ala	Gly	Asp	Val	Gln	Asp	Lys	Lys	Tyr	Arg	Gln	Ala	
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266 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly  
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271 65 70 75 80  
272 Glu Arg Phe Gly Thr Thr Ile Phe Thr Glu Thr Val Thr Lys Val Asp  
273 85 90 95  
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277 115 120 125  
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280 Ser Ala Cys Ala Val Cys Asp Gly Ala Ala Pro Ile Phe Arg Asn Lys  
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286 Ala Phe Arg Ala Ser Lys Ile Met Gln Gln Arg Ala Leu Ser Asn Pro  
287 195 200 205  
288 Lys Ile Asp Val Ile Trp Asn Ser Ser Val Val Glu Ala Tyr Gly Asp  
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294 His Glu Pro Ala Thr Lys Phe Leu Asp Gly Gly Val Glu Leu Asp Ser  
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Output Set: N:\CRF3\04242002\J032201A.raw

Please Note:

se of n and/or Xaa have been detected in the Sequence Listing. Please review the sequence Listing to ensure that a corresponding explanation is presented in the <220> o <223> fields of each sequence which presents at least one n or Xaa.

eq#:101; Xaa Pos. 16,17,38,42,45,54,55,58,66,72,75,79,80,81,94,99,103  
eq#:109; Xaa Pos. 17,38,42,55,58,60,72,107  
eq#:134; Xaa Pos. 21,35  
eq#:245; Xaa Pos. 33,45,46  
eq#:275; Xaa Pos. 9,11  
eq#:287; Xaa Pos. 524  
eq#:288; Xaa Pos. 666  
eq#:290; Xaa Pos. 523  
eq#:293; Xaa Pos. 520  
eq#:294; Xaa Pos. 578  
eq#:295; Xaa Pos. 523  
eq#:296; Xaa Pos. 576  
eq#:300; Xaa Pos. 612  
eq#:303; Xaa Pos. 523  
eq#:304; Xaa Pos. 527  
eq#:307; Xaa Pos. 497  
eq#:309; Xaa Pos. 497  
eq#:312; Xaa Pos. 525  
eq#:313; Xaa Pos. 498

se of <220> Feature(NEW RULES):

quence(s) are missing the <220> Feature and associated headings.  
se of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) Sec.1.823 of new Rules)

eq#:10 (16) 17,18,19,22,24,27,30,33,34,35

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002

TIME: 10:57:51

Input Set : A:\351bseq.002  
Output Set: N:\CRF3\04242002\J032201A.raw

:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
:162 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:166 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:10  
:538 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:541 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
:544 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
:680 M:258 W: Mandatory Feature missing, <220> FEATURE:  
:680 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
:704 M:258 W: Mandatory Feature missing, <220> FEATURE:  
:704 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
:737 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:740 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
:743 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
:856 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19  
:945 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:948 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22  
:1151 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24  
:1434 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:1437 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
:1440 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
:1729 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:30  
:2066 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33  
:2297 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:34  
:2330 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
:2334 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
:2340 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
:4706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0  
:4708 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:16  
:4710 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:32  
:4712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:48  
:4714 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:64  
:4716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:80  
:4718 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:96  
:4895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16  
:4897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:32  
:4899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:48  
:4901 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:64  
:4905 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:96  
:5488 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:16  
:5490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:32  
:9690 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:32  
:11041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:0  
:11598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:512  
:11695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:656  
:11848 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:512  
:12071 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293 after pos.:512  
:12158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:576  
:12237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:512

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002

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Input Set : A:\351bseq.002  
Output Set: N:\CRF3\04242002\J032201A.raw

:12322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:560  
:12637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:300 after pos.:608  
:12850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:303 after pos.:512  
:12929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:512  
:13152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:307 after pos.:496  
:13259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:309 after pos.:496  
:13418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:312 after pos.:512  
:13495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:313 after pos.:496